

Claims

1. Suspension hook for a tube (2; 22; 42) and in particular a motor vehicle exhaust tract tube constituted by a pin (3; 23; 43) which comprises a generally cylindrical end-piece (7, 7A; 27; 47) for fixing to at least one spacer and at least one spacer (8; 28, 28'; 48) comprising, at a first end, at least one lug (12, 12'; 29, 29'; 49) for fixing to the fixing end-piece, and, at a second end, at least one plate for fixing to a tube (11, 11'; 30, 30'; 50), the at least one fixing lug (12, 12'; 29, 29'; 49) and the fixing end-piece (7, 7A; 27; 47) being fixed by means of welding, characterised in that the at least one fixing lug (12, 12'; 29, 29'; 49) and the fixing end-piece (7, 7A; 27; 47) co-operate by means of a contact of the type involving a plane on a generating line.

2. Hook according to claim 1, characterised in that the at least one fixing plate (11, 11'; 30, 30'; 50) is shaped so as to be able to co-operate with a tube (2; 22; 42) which is generally arranged perpendicularly relative to the longitudinal axis of the at least one spacer (8; 28, 28'; 48).

3. Hook according to claim 1 or 2, characterised in that it comprises a spacer (8) which comprises two fixing plates (11, 11') and two generally planar fixing lugs (12, 12'), and in that the end-piece (7, 7A) for fixing to the pin (3) is arranged between the two fixing lugs (12, 12') generally perpendicularly relative to the longitudinal axis of the spacer (8).

4. Hook according to claim 3, characterised in that the fixing end-piece (7A) has a circular cross-section, in that the fixing lugs (12, 12') of the spacer (8) are generally

parallel with each other, and in that the fixing lugs (12, 12') are welded to the fixing end-piece (7A) by means of laser welding.

5. Hook according to claim 3, characterised in that the fixing end-piece (7) comprises two longitudinal flat surfaces (14, 14') which are parallel with each other, and in that the fixing lugs (12, 12') are fillet-welded to those flat surfaces.

6. Hook according to claim 1 or 2, characterised in that the at least one spacer (28, 28'; 48) comprises a single fixing lug (29, 29'; 49) in the form of a channel which extends along the longitudinal axis of the spacer, and in that the fixing end-piece (23; 43) is arranged in the channel parallel with the longitudinal axis of the spacer.

7. Hook according to claim 6, characterised in that the channel-shaped fixing lug (29, 29'; 49) of the spacer (28, 28'; 48) comprises two faces (31, 32, 31', 32') which are generally at right-angles, and in that the fixing end-piece (27; 47) comprises at least one longitudinal flat surface which co-operates with a face of the channel.

8. Hook according to claim 6 or claim 7, characterised in that it comprises two spacers (28, 28').

9. Spacer of a hook according to any one of claims 3 to 5, characterised in that it comprises a body which has a large, generally trapezoidal face (9) and two lateral faces (10, 10') which are each extended, at one side, from the side of the small base of the large trapezoidal face (9), by a planar lug (12, 12') which is generally parallel with the longitudinal

axis of the spacer and, at the other side, from the side of the large base of the large trapezoidal face (9), by a plate which is shaped in order to be able to co-operate with a tube which is perpendicular relative to the large trapezoidal face (9) of the spacer.

10. Spacer of a hook according to any one of claims 6 to 8, characterised in that it comprises a plate (30, 30', 50) which is shaped so as to be able to co-operate with a tube and a fixing lug (28, 28', 48) which is arranged in the continuation of the plate (30, 30'; 50) along the longitudinal axis of the spacer, the fixing lug (28, 28'; 48) being in the form of a channel.

11. Motor vehicle comprising an exhaust tract which comprises at least one tube which is suspended by means of at least one hook according to any one of claims 1 to 8.